

**REMARKS**

As a result of the foregoing amendment, claim 15 has been amended to delete the word "between" thereby removing the objection to that claim.

The examiner's indication that claims 2, 3, 7-12 and 15 would be allowable if amended to overcome the above the objection is appreciatively acknowledged. As a result of the foregoing amendment, it is clear that these claims are in condition for allowance.

New claims 16, 17 and 18 have been added.-New claim 16 is an independent claim directed to a high temperature stable fiber composite. This claim defines the process steps used to manufacture this ceramic and represents a combination of the process steps recited in claim 15 and claim 10. New claims 17 and 18 track the recitations of claims 13 and 14 but depend from new claim 16.

Reconsideration and withdrawal of the rejection of claims 14 and 15 as well as new claims 16, 17 and 18 as being anticipated by the Hüttinger et al reference are requested. The examiner asserts that Hüttinger teaches a chemical vapor infiltration process for depositing silicon carbide into a free-form using methyl trichlorosilane as a precursor in a hydrogen carrier gas. The examiner further asserts that the carrier gas is taught to be within the applicants range and that the reference discloses pressures within the range claimed. Further, the examiner asserts that the porosity disclosed in the reference is within the range recited in the claims. However, the examiner recognizes that this reference does not explicitly teach the pre-reacting step required in making the present product. Indeed, the reference is devoid of any suggestion of a pre-reacting step. The examiner argues that this is a method limitation in a product claim. However, in the claims as they stand, this recitation is imperative in order to obtain the inventive laminate.

As described in the specification of the present application, an important property of the heat resistant material of the invention is that the silicon carbide is deposited very deeply into the matrix. It is pointed out in the specification at page 4, lines 3-8 that the deposition of the silicon carbide into an 8 mm thick laminate a plain-woven carbon fiber fabric with a fiber volume content of 43% was to a depth of 4 mm from both sides meaning that the entire thickness of the laminate was infiltrated. The depth of this infiltration is a direct result of the pre-reaction step used to make the matrix.

The preforms of the present invention have silicon carbide deposited very deeply into their matrices which is not the case using the Hüttinger process. Moreover, notwithstanding the high infiltration depth of the inventive products, a density gradient-over the thickness of the wall of large-size preforms as recited in claims 13, 14, and 16-18 is formed.

With the present invention, significantly large structural component parts with high temperature stability are obtained. The Hüttinger process does not allow the formation of such structures.

In addition, as recited in new claim 16, a binder is used during the chemical vapor infiltration to fix the fibers of the inventive matrix. The reference suggests no such component. Accordingly, this reference does not disclose the present invention as claimed and certainly cannot be anticipatory.

The very fact that the procedure used to produce the inventive temperature stable fiber composite ceramic requires an additional step nowhere disclosed nor suggested by the reference makes it clear that the article obtained by virtue of the process cannot be disclosed by this reference. Accordingly, the rejection thereon is untenable and should be withdrawn.

In view of the foregoing, it is submitted that this application is now in condition for allowance and favorable reconsideration and prompt notice of allowance are

earnestly solicited.

Respectfully submitted,

Dated: April 11, 2006

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